

IN THE CLAIMS

1-13. (Canceled)

14. (Original) Apparatus for providing at least first and second representations of a signal, the first representation being different from the second representation, the apparatus comprising:

a first quantizer for quantizing at least a portion of the signal in accordance with a first multidimensional lattice to generate the first representation; and

a second quantizer for quantizing at least the portion of the signal in accordance with a second, different multidimensional lattice to generate the second representation, the first quantizer and the second quantizer being complementary to each other.

15. (Original) The apparatus of claim 14 wherein at least one of the first and second multidimensional lattices include a plurality of cells, at least two of the cells being different from each other.

16. (Original) The apparatus of claim 14 wherein the signal includes a plurality of frequency components and the portion of the signal includes a subset of the plurality of frequency components.

17. (Original) The apparatus of claim 14 wherein the signal contains audio information.

18. (Currently amended) The apparatus of claim 17 wherein the signal is encoded in accordance with a PAC perceptual audio coding technique.

19-40. (Canceled)

41. (Original) A method for use in an apparatus for providing at least first and second representations of a signal, the first representation being different from the second representation, the apparatus including a first quantizer and a second quantizer, the first quantizer and the second quantizer being complementary to each other, the method comprising:

quantizing at least a portion of the signal using the first quantizer in accordance with a first multidimensional lattice to generate the first representation; and

quantizing at least the portion of the signal using the second quantizer in accordance with a second, different multidimensional lattice to generate the second representation.

42. (Original) The method of claim 41 wherein at least one of the first and second multidimensional lattices include a plurality of cells, at least two of the cells being different from each other.

43. (Original) The method of claim 41 wherein the signal includes a plurality of frequency components and the portion of the signal includes a subset of the plurality of frequency components.

44. (Original) The method of claim 41 wherein the signal contains audio information.

45. (Currently amended) The method of claim 44 wherein the signal is encoded in accordance with a PAC perceptual audio coding technique.

46-54. (Canceled)